



RAGCHEW

NOVEMBER 2020

FROM THE EDITOR

Now in our second National lockdown, and with the dark nights, I'm certainly spending more time in the shack. I have a backlog of minor and not-so-minor repair jobs to do; hopefully they will form the basis of some future "Ragchew" articles.

Some of our members have been taking the opportunity to sit online exams during the lockdown. Congratulations to **Larry G0SDG** and **Sally 2E0UWU** on acquiring their new call-signs.

The **Winter Challenge** has now started and runs until 9th January 2021 - do give it a try - the more the merrier. Don't worry if you are not competitive - use it as an excuse to **get on the air!** See my thoughts in this issue.

Mike G4IZZ writes about the speedy response from **K1GQ** when he reported a glitch on an update to his logging program "**SkookumLogger**".

Mike G6OTP has submitted a thought-provoking article entitled "**How to Build a Steam Engine**" and it goes a long way towards explaining why I have so many unfinished projects lying around. I hope you find it as interesting as I did!

In **Vintage Revival** I report on the QSOs I've had running my old **Icom IC202S** into the recently-repaired **Heath VL2280** 2m amplifier.

Malcolm G6UGW's series reviewing the Radio Spectrum from 300Hz - 300GHz is nearing completion and in this penultimate article he describes the Super High Frequency band 3GHz - 30GHz.

Next month will be the Christmas issue of "Ragchew". It's been a challenging year for everyone - do let me know what you've been up to in your shack. Have you just joined GARES? The members would love to know how you got into amateur radio and your ideas on what you would like the club to do.

73 Brian G4CIB (g4cib@outlook.com)

December "Ragchew"

Copy please by Saturday 5th December

Contest Roundup by Brian G4CIB

With just one month to go, we're in **21st** equal place with **Telford ARS** in the **VHF UKAC Local Clubs** table. **Telford ARS** members, however, are active on UHF and SHF UKAC events of which the November results are still to be published so expect us to drop a place in the final end-of-year table.

Also now in the final stages we are maintaining **4th** position in the **2m FMAC Local Clubs** table. Looking at the clubs above and below us, namely the **Tall Trees Contest Group** and the **Redditch Amateur Radio and Contest Group** respectively, and their scores, barring a disaster it looks as if our position in the table will remain unchanged by the end of the year.

In the **70cm FMAC Local Clubs** table where we are also currently in **4th** position, the same two clubs are immediately above and below us but the margin is much closer so we will need a good turnout for the December event to maintain our position.

On HF, in the **Autumn Series Local Clubs** table, with a strong result in the November Data section (thanks to **G4ENZ**, **M0XAC**, **M0NQN** and **G4IZZ**), the club went up a place and is now in **15th** position.

Several members recently took part in the **Club Calls (1.8MHz AFS)** contest, **Les G0ULH** operated from his home QTH as **G4AYM** (club HQ station) along with **Gary M0XAC** and myself operating from our home QTH's as club members. It's quite a few years since we put an entry into this contest and I'd forgotten how challenging operating on 160m is these days. An enjoyable event nevertheless and it prompted an exchange of emails between Gary, Les and myself about suitable antennas for this band. Another Top Band contest is looming, the **2nd 1.8MHz Contest** on Saturday 21st November from 1900-2300 which I'm hoping to take part in.

Mike G4IZZ was active in the recent **OK-OM DX contest** - let us know how you got on Mike!

Just one other date to mention and that is **Sunday 6th December - 2m AFS (Affiliated Societies) contest**. It runs from 1000-1400 UTC. As our club is affiliated to the RSGB all entries from club members will contribute to our overall score. **You do not need to be an RSGB member** to put in an entry - see the RSGB website for full details.

Excellent Support for “SkookumLogger”

A report from Mike G4IZZ

I know there's not many Mac users in the club, but for any that there are - and who might be looking at the contest logging program called 'SkookumLogger', I wanted to let you know about the support you can expect.

At 11:30am on Thursday 12th November, I emailed Bill, (K1GQ), who wrote the software (which is free) to say that I'd noted a problem with the latest version, which I'd downloaded an hour earlier. At 13:30 I had an email from him (in the States) asking me for more specific information. Another email from Bill 20 minutes later said he was going to start rewriting some of the software. At 2:30pm I received a zip file with a beta version from Bill who thought the attached software should fix the problem. I immediately ran the program - and found that, yes indeed, the problem had been fixed.

So from finding a problem with a logging program, to having new software written and sent to me, took around three hours. That's pretty impressive I reckon.

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Do you have any examples of first-class service from amateur radio suppliers - either hardware or software? If so, let other members know by sending a report to me at g4cib@outlook.com and I will include it in future issues of “Ragchew”.

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How to build a steam engine

By Mike G6OTP

I have a very good friend who is a first-class model engineer. Now, once upon a time, many years ago, I mentioned that I would like to build a steam engine. “Oh”, he said, “You know that if it is a locomotive, you build the tender first or if it's a stationary engine then the boiler and plinth.” To cut a long story short, here's why.

While the whole project is going to need skill and a lot of patience, starting on the tender (the less demanding although still important) means that you can make and correct your mistakes there and work up your skills and expertise (not only the use of tools but the sourcing of materials and components) before the main part of the project. More importantly, when you have finished the lesser part, you should still have enough energy and enthusiasm left for the main part and when the engine is finished, you will have all the ancillary parts to use it straight away.

Doing it the other way round, how many unfinished engine projects were there that had foundered for lack of skill, expertise and patience? Many that were finished never got steamed because the builder still needed the tender or steam plant and had 'worn himself out'.

Now, what has this got to do with amateur radio? Well for engine read Rx/Tx, SDR project or whatever else and for the tender read PSU, AMU, antenna, case and so on. Some of you may disagree but I do have a number of unfinished projects to my (dis)credit through not following my friend's advice.

I never did build my engine although I did build and test the steam plant for a small beam engine. Lack of cash and another hobby got in the way but I gave the boiler to my friend who was able to make good use of it for quite a number of years.

I have a couple of projects on the go at the moment and am applying my friend' advice. One is to restore an old domestic valve receiver c1947. Having had a good look at it, I think it is worthwhile going ahead but where to start? Although I really want to get into the circuitry, I am going to refurbish the case first which will mean learning some new techniques on furniture finishing that I hope will make it XYL proof.

From one extreme to the other, I am having a go at DATV (digital amateur television) but that is another story. More I hope, later.

A Vintage Revival – a follow-up to the VL2280 amplifier repair by Brian G4CIB

Having replaced the PA transistor in my old Heath VL2280 2m amplifier (see last month's "Ragchew"), it seemed a shame not to actually use it, so fired-up with enthusiasm I looked around my shack for something age-compatible to drive it. Step forward my battle-worn IC202S. I purchased this rig new in the early 1980s and it is now much travelled – but still works well. It covers 200kHz portions of the 2m band, with appropriate HC25-U crystals in a VXO circuit. There is space for 4 crystals, two were fitted with the rig as supplied new, covering 144.000-144.200 MHz and 144.200-144.400 MHz. Two spare crystal sockets enable the user to select other 200kHz portions. In my rig I fitted a crystal to cover the "beacon" portion – 144.400-144.600 MHz. And thereby hangs another tale – but that must wait for a future issue of "Ragchew".

Since writing last month's article, I've done some further tests on the VL2280 and one thing I realised was that I was expecting too much output – the RF output for 10 watts input is specified as 75 watts, not 90 watts. Also I had another look at the voltage regulator board and with some tweaking the output voltage is now on-spec at 13.8V DC.

My loft "antenna farm" contains a 5 element ZL special for 2 metres mounted on a rotator and recently I've been using it with my IC202S/VL2280 combination, in particular the November 2m UKAC. With 3 watts of drive from the IC202S, the amplifier puts out 40 watts and I managed to work amongst others GD8EXI (IO74), G4FZN/P (IO94) and G4CZP/P (IO90).



Just before putting this "Ragchew" together I put out a call on 144.300MHz (ssb calling frequency) and worked **Paul M0PVN/P** on the Lickey Hills, south of Birmingham and was then called by **Ken G3LVP**. Both stations mentioned the lack of 2m activity particularly on ssb except when there is a contest on. A few years ago **Lyn GW8JLY** (who is now **G8JLY** and lives near Coventry) tried to drum up more 2m ssb activity. So here's a challenge - put out a call on a non-contest date/time on 144.300 ssb and let me know who you've worked.

Located below this set-up is a home-brew QQV060-40A Class C amplifier to a design in the 1970 Radio Communication Handbook, along with a suitable power supply – HT 500V DC at 250ma and 6.3V AC heater supply. Being in Class C this amplifier is only suitable for FM or CW transmission so I've coupled it to my old FT480R, a 2m multi-mode rig of similar vintage to my IC202S. So during the current lock-down, I'll be doing some tests with this combination and report my results in the next "Ragchew"

Postscript: Just as I was putting the finishing touches to this article, I heard a signal come up on 144.300MHz - it turned out to be **Rich M0RHK** located near Stourbridge. Naturally **Leta G4RHK** had to join in what was an enjoyable half-hour QSO! Rich is an active member of the **Dudley and District Amateur Radio Society M0RSD** located at **Ruiton Windmill, Dudley**. Their members, like ours, are missing the regular meetings and hoping for better times to come.

Another Postscript: It's after lunch and I'm pressing on with more articles and have just worked **G4HOJ Philip** located in Lincoln, IO93RD. He was calling CQ on 144.300MHz.

The Winter Challenge (and another vintage revival)

The 2020/21 Winter Challenge recently started* and as has become traditional for me I will be using the opportunity to have a personal challenge within the challenge. As I'm currently in "Vintage Revival" mode, I've blown the dust off my old **Heathkit HW8 QRP CW transceiver** and started to log QSOs for the challenge. For those unfamiliar with this rig, it dates back to the early 1980s and I purchased mine on a business trip to the USA and the story has been told before in a previous "Ragchew" how I completed building the set just before 29th July 1981, the day Prince Charles married Lady Diana Spencer and one of my first QSOs with this rig was with **GB2PHQ**, a Special Event Station operating from the Post Office Tower in London to celebrate the Royal wedding. The rig runs a couple of watts of CW on 80m, 40m, 20m and 15m and has a direct conversion receiver - that is a challenge in itself on 40m when it's busy! As usual with any old equipment that's not been used for a while you are never sure if it will work properly when you switch it on, and I thought I had a problem when I powered up the HW8. The audio didn't sound right, and with the audio filter in the narrow setting, things were definitely amiss, also the sidetone volume was virtually nil. Studying the circuit diagram in the Heathkit manual I initially suspected the LM3900 quad audio IC but as other functions including keying the transmitter (which worked OK) are generated from the LM3900 I came to the conclusion that the fault was something else. Indeed it turned out that the problem was in the old headphones I was using! Anyway, with another set of headphones all was well and I look forward to clocking up some QSOs for the Winter challenge.



The Heathkit HW-8 all set up along with my HFT-9 Antenna Tuner and HM-9 QRP SWR/Wattmeter.

Note the paper log, also the vintage headphones and Hi-Mound key c1980.

I understand that **Dave G4BCA** has received notification from eleven members wishing to take part. Even if you do not want to take part seriously - and using my HW8 qualifies on that score, do give it a try and set yourself a challenge even if the challenge is just to get on the HF bands

*If you have not yet registered to take part in the Winter Challenge email dave.tunncliffe2016@outlook.com and he will send you the entry spread sheet (in Excel) and a list of countries/DX entities.

The Radio Spectrum by Malcolm G6UGW

Part 8 - Super High Frequency 3GHz-30GHz

These frequencies correspond to wavelengths between 10cm and 1cm

This range of frequencies are used for radio astronomy, microwave devices and communications, wireless LAN, radar, communications satellites, cable and satellite television broadcasting, DBS, amateur radio (10GHz band) and satellite radio

(Final part next month)

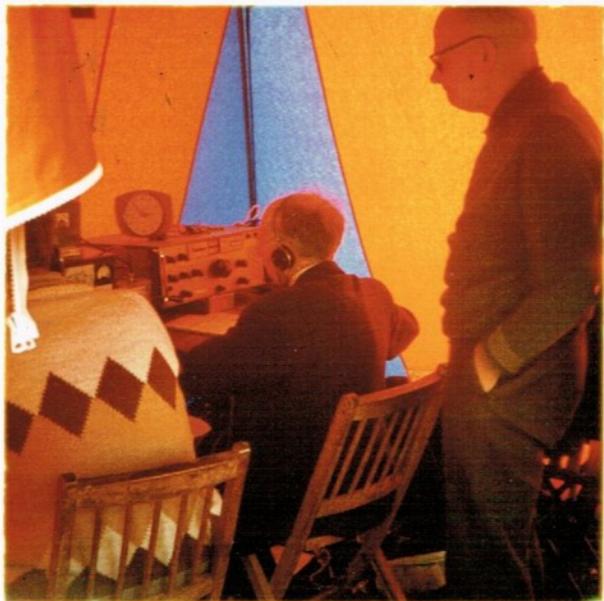
From the Archives

We were saddened to hear of the recent death of **Mike G3TEV**. Older members may remember Mike coming along to our NFD site at the Gordon League Rugby Ground in the early 1970s. I've trawled through my collection of old photographs and come up with two, the first taken in 1973 at a GARS Dinner Dance held at the Fleece Hotel, Westgate Street. Here is Mike with his XYL along with **Ron G3SZS** and his XYL.



National Field Day 1973 Sorry it's a back view but that really is **Mike G3TEV** on the left in the patterned pullover, who is logging, **Mick G2HDU** (centre) operating, with a pensive **Owen G2HX** looking on.

This was obviously before the days of computers and National Field Day (NFD) was not only an operating challenge but a paperwork challenge too. The log was hand-written, also the check-log. Post-contest work involved very often re-writing the log to make it legible and suitable to submit to the RSGB, and also manually cross-checking call signs to make sure /P stations were properly logged. Check-logging for NFD was the introduction to contesting for many new club members! Ask **Leta G4RHK** sometime for her check-logging experiences!



December "Ragchew"

Another year has rolled by - a year like no other! The next issue of "Ragchew" will be the Christmas issue - and I look forward to receiving your articles for publication which you can send to me at g4cib@outlook.com